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10/706,336

11/12/2003

Mark Weber

NOVA 9250

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1338 7590 10/02/2007  
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EXAMINER
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CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/706,336  
Filing Date: November 12, 2003  
Appellant(s): WEBER ET AL.

**MAILED**  
**OCT 02 2007**  
**GROUP 1700**

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Kenneth H. Johnson  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed May 16, 2007 and July 26, 2007 appealing from the Office action mailed November 15, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

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**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,804,660	WHETTEN et al.	9-1998
5,747,594	deGROOT et al.	5-1998

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whetten et al. (U.S. Patent No. 5,804,660) in view of deGroot et al. (U.S. Patent No. 5,747,594).

Whetten discloses a container (*col. 2, lines 2-7*) having a nominal volume of 100 mL to 12 L (*col. 2, line 5, 16 ounces is equivalent to 473 mL and 1 gallon is equivalent 3.8 L*) prepared by injection molding (*col. 1, line 48*) of ethylene copolymer (*col. 1, lines 20-28*). The ethylene copolymer resin is characterized by a density from 0.950 g/cc to 0.955 g/cc (*col. 10, lines 21-25*) and a viscosity less than 3.5 Pascal seconds (*col. 7, lines 32-35, 0.01 kpoise is equivalent to 1 Pascal second and 15 kpoise is equivalent to 1500 Pascal seconds*) and a molecular weight distribution from 2.2 to 2.8 (*col. 10, line 47*).

Whetten fails to disclose the Vicat softening point and the hexane extractable content.

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deGroot discloses ethylene copolymer for food storage containers (*col. 1, lines 30-35*) exhibiting a low hexane extractives and a high Vicat softening point (*col. 2, lines 10-41*). A high Vicat softening point promotes heat resistivity and are more economically prepared (*col. 2, lines 4-20*). A low level of hexane extractives indicates a lower tendency for low molecular weight impurities or polymers fractions to migrate into sensitive packaged goods such as foodstuffs in food contact applications (*col. 1, lines 49-53*).

Therefore, the exact Vicat softening point and hexane extractable content of the contained is deemed to be a result effective variable with regard to the heat resistivity. It would require routine experimentation to determine the optimum value of a result effective variable, such as Vicat softening point and hexane extractable content, in the absence of a showing of criticality in the claimed Vicat softening point and hexane extractable content. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). One of ordinary skill in the art would have been motivated by have a high Vicat softening point and a low level of hexane extractives in order to promotes heat resistivity and are more economically prepared (*col. 2, lines 4-20*) and lower the tendency for low molecular weight impurities or polymers fractions to migrate into sensitive packaged goods such as foodstuffs in food contact applications (*col. 1, lines 49-53*).

The combination of Whetten and deGroot disclose all the limitations of the ethylene copolymer used to make the container. Therefore, the claimed average test drop height point value and total impact energy required for wall failure is deemed to be inherent, unless Appellant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art.

**(10) Response to Argument**

2. Appellant's arguments in the Appeal Brief filed May 16, 2007 regarding the 35 U.S.C. 103 rejection over Whetten in view of deGroot of record have been carefully considered but are deemed unpersuasive.

Appellant argues that the containers of Whetten are made with a polymer blend which is characterized by the use of a specific impact modifier, component B and "at least one polyolefin", component A. Appellant further discloses that Whetten does not teach or suggest the criticality of using an overall I/M composition that has a high density and/or a narrow molecular weight distribution. Appellant further points to the examples in Whetten.

First, Appellant's claims do not exclude the use of a blend composition. Second, Whetten's component A, which comprises up to about 99% of the whole composition has overlapping ranges of the claimed density, viscosity and molecular weight distribution. Third, Appellant has not provided any evidence to show that the addition of component B, the impact modifier, at about 1% would change the density, viscosity or molecular weight distribution. Fourth, the examples in Whetten do not show the modifier component between about 1%-5%. The closest example is in table 3, example 29 where the modifier was add at 5% and the composition density was 0.948. Therefore, it is reasonable to expect the density of the composition to be similar if not the same as the density of component B, when component A is add in the amount between about 1%-5%, absent evidence.

Appellant noted that the teaching of Wetten et al. '660 at col. 8, lines 60-62 regarding the narrow molecular weight distribution is with respect to the "impact modifier," component B not

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of component A. The examiner apologizes for the typographical error, the correct column and line cite is column 7, line 47. Component A, the at least one polymer which can comprise up to about 99% of the polymer composition has a molecular weight distribution at a least about 3. The phrase "at least about 3" allows for some variation above and below the value 3, which would include very similar values such as 2.8.

Appellant argues that Whetten in no way teaches or suggests the criticality of using overall I/M composition which has a density of from 0.950 to 0.955 g/cc. The fact that Appellant uses the composition for a different purpose does not alter the conclusion that combination of Whetten and deGroot discloses the composition.

Appellant argues that Whetten does not disclose the vicat softening temperature or the drop strength of the container. The examiner agrees which is why she relied upon deGoot to teach those limitations. In response to Appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

Appellant argues that Whetten strongly suggests that the container will not have a high Vicat softening point. Furthermore, Appellant admits that such tests are routine. In view of Appellant's admission that that the vicat softening temperature and hexane extractable content is obvious to optimize and have not provided any evidence showing that Whetten does not have a high Vicat softening point, the argument is moot.

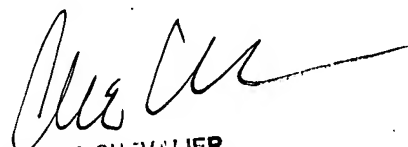
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**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

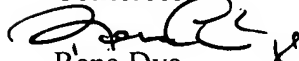
Respectfully submitted,



**ALICIA CHEVALIER**  
**PRIMARY EXAMINER**


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Conferees:



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